UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF CALIFORNIA

CONSERVATION CONGRESS and KLAMATH FOREST ALLIANCE,

NO. CIV. S-07-2764 LKK/KJM

Plaintiffs,

v.

O R D E R

UNITED STATES FOREST SERVICE,

Defendant.

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Plaintiffs Conservation Congress and Klamath Forest Alliance have challenged the United States Forest Service's proposed Pilgrim Vegetation Management Project in the Shasta-Trinity National Forest. In an order filed May 13, 2008, the court resolved the parties' cross motions for summary judgment. Conservation Cong. v. U.S. Forest Serv., 555 F. Supp. 2d 1093 (E.D. Cal. 2008). After granting plaintiffs' motion in part, the court "enjoin[ed] the Pilgrim project and remand[ed] the matter to the agency for further action consistent with [that] order." Id. at 1110.

The Forest Service moves for relief from that order. The

court resolves the matter on the papers and after oral argument. For the reasons stated below, the Forest Service's motion is granted and the injunction is dissolved.

I. Background

The court previously described the Pilgrim proposal as follows. Neither party disputes that characterization, and the scope of the proposal has not changed.

> The Pilgrim project lies northeast of the community of McCloud, California. In recent years, the project area has experienced significant tree mortality from insect attacks in overcrowded portions of the forest and from root disease in ponderosa pine. AR[1] 521. According to defendant, the basic design of the Pilgrim Project contains four components. Id. First, the project will thin forest stands that are overcrowded and in which trees face over-competition for water and nutrients. Id. Second, the project will remove dead and dying trees from certain stands in order to control the spread of disease and infestation and allow the stands to regenerate. Id. Third, in connection with this sanitation harvest, the project will remove smaller, dense understory trees that act as fuel ladders to reduce the likelihood of catastrophic fires. AR 521-22. Fourth, the project will also remove overtopping conifers to allow oak and aspen stands currently being lost due to over-competition to reestablish themselves. AR 522.
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> The vegetation management treatments will take place on approximately 3,800 acres. AR 166. Specifically, the project will, among other

[1] The court previously cited to the administrative record as "AR." In the present motion, the Forest Service has submitted a supplemental administrative record containing documents considered or produced by the agency after judgment was entered. The court refers to the prior record as the "Administrative Record" or "AR" and to the new record as the "Supplemental Administrative Record" or "SAR."

> things, undertake the following: commercial thinning and sanitation harvest on 3,100 acres of assertedly overstocked coniferous stands, regeneration treatment in 415 acres of diseased and insect-infested stands and replanting with conifer seedlings, and restoration of 275 acres of dry meadows by removal of encroaching conifer trees. AR 155. With respect to the regeneration treatment on the 415 acres, the otherwise applicable standard of retaining 15% of the largest green trees (the "15% GTR" standard) will not be met on 255 acres, because defendant maintains that there are not enough disease-free trees to meet the standard. Id.

Conservation Cong., 555 F. Supp. 2d at 1097 (footnotes omitted).

Pursuant to the Forest Service's obligations under the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370f ("NEPA") and the National Forest Management Act, 16 U.S.C. § 1600 et seq. ("NFMA"), the Forest Service prepared an Environmental Impact Statement ("EIS") for the Pilgrim project.[2] The EIS was required "to estimate the effects of [the proposed project] on fish and wildlife populations." Conservation Cong., 555 F. Supp. 2d at 1101. The court interpreted the EIS as having used a "proxy-on-proxy" approach in an attempting to meet this obligation. Rather than estimate effects on all species directly, the Forest Service identified five "assemblages" of multiple species, and selected an individual species that would serve as the proxy for the health of each assemblage. This species was referred to as the "management

[2] Available at http://www.fs.fed.us/nepa/project_content.php?project=4254 (click "Final Environmental Impact Statement [includes appendices and maps]") (last visited Sept. 5, 2010).

indicator species" or "MIS." Then, rather than predict the effects the project would have on indicator species directly, the Forest Service used habitat as a proxy for the indicator species' health.

The court held that this analysis was inadequate with respect to mule deer, the species used to represent the "open and early seral" and "multi-habitat" assemblages, and the red-breasted nuthatch, the species used to represent the "late seral" and "snag and down log" assemblages. Id. at 1103-04. For these species, the Forest Service had not shown "an accurate and reliable correlation between habitat health and species health," so it was inappropriate to use the former as a proxy for the latter. Id. at 1101-04. The court therefore enjoined the project and remanded to the Forest Service.

On remand, the Forest Service completed a supplemental environmental impact statement ("SEIS").[3] The Forest Service now moves for relief from that injunction under Fed. R. Civ. P. 60(b)(5). The Forest Service contends that the SEIS provides additional data and analysis demonstrating that habitat is an appropriate proxy for mule deer and red-breasted nuthatch populations. The Forest Service also contends that the governing statutes, regulations, and forest plans permit the Forest Service to monitor habitat directly, dispensing with the proxy-on-proxy approach. Plaintiffs oppose this motion.

[3] Available at http://www.fs.fed.us/nepa/project_content.php?project=4254 (click "Final Supplemental Environmental Impact Statement - January 2010") (last visited Sept. 5, 2010).

II. Standard

A. Standard for a Fed. R. Civ. P. 60 Motion for Relief from a Judgment

Fed. R. Civ. P. 60(b)(5) provides that a party may obtain relief from a court order when "the judgment has been satisfied, released, or discharged . . . or applying it prospectively is no longer equitable." See Rufo v. Inmates of the Suffolk County Jail, 502 U.S. 367 (1992). The party seeking the modification bears the burden of proving that a significant change of circumstances warrants the modification of the prior order. Id.; Bellevue Manor Associates v. United States, 165 F.3d 1249, 1255 (9th Cir. 1999). In this situation, the proposed modification must be tailored to the changed circumstance. Bellevue Manor, 165 F.3d at 1255. Alternatively, the modification may be made if the party seeking it shows that "enforcement of the decree without modification would be detrimental to the public interest." Rufo, 502 U.S. at 384.

B. Standard for Review of Agency Action under 5 U.S.C. § 706(2)

In reviewing whether the SEIS has satisfied the prior order and renders prospective application thereof inequitable, the court again applies the standard for review of agency action contained in the Administrative Procedure Act ("APA").

The APA authorizes the court to set aside agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A). An agency decision is arbitrary or capricious where the agency "relied on factors Congress did not intend it to consider, entirely failed to

consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Lands Council v. McNair, 537 F.3d 981, 987 (9th Cir. 2008) (en banc) (quotations omitted). The agency "must articulate a rational connection between the facts found and the conclusions reached." Earth Island Inst. v. U.S. Forest Serv., 442 F.3d 1147, 1157 (9th Cir. 2006) (citing Midwater Trawlers Co-op v. Envtl. Def. Ctr., 282 F.3d 710, 716 (9th Cir. 2002)).

This standard is especially appropriate when reviewing factual determinations that implicate an agency's scientific expertise. Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife, BLM, 273 F.3d 1229, 1236 (9th Cir. 2001). Even for scientific questions, however, a court must intervene when the agency's determination is counter to the evidence or otherwise unsupported. See, e.g., Sierra Club v. U.S. Envtl. Prot. Agency, 346 F.3d 955, 962 (9th Cir. 2003), amended by 352 F.3d 1187 (9th Cir. 2003) (rejecting agency's factual conclusion about cause of air quality exceedance).

III. Analysis

A. Statutory and Regulatory Background

NFMA imposes various substantive obligations on the Forest Service, including the obligation to "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." 16 U.S.C. § 1604(g)(3)(B).

NFMA sets forth two levels of "procedures" to be used in meeting this obligation. Lands Council, 537 F.3d at 988. The Forest Service must develop general plans for land management and ensure that individual projects comply with the statute and plans.[4]

1. Forest Plans

At the more general level, the Forest Service adopts Land and Resource Management Plans. "These plans operate like zoning ordinances, defining broadly the uses allowed in various forest regions, setting goals and limits on various uses . . . but [the plans] do not directly compel specific actions." Citizens for Better Forestry v. U.S. Dep't of Agric., 341 F.3d 961, 966 (9th Cir. 2003). Two such plans cover the Pilgrim project. One is the Northwest Forest Plan, which pertains solely to the northern spotted owl and spans many national forests. The court previously held that the Pilgrim project EIS's discussion of the northern spotted owl was adequate, and plaintiffs present no arguments relating to the northern spotted owl in opposition to the present motion. Accordingly, the Northwest Forest Plan is not at issue here. The second is the Shasta-Trinity National Forest Land and Resource Management Plan, referred to hereinafter as the "Shasta

[4] A third and more general level of procedures is NFMA's requirement that the Forest Service promulgate regulations implementing NFMA. Citizens for Better Forestry v. U.S. Dep't of Agric., 632 F. Supp. 2d 968, 970 (N.D. Cal. 2009) (citing Citizens for Better Forestry v. U.S. Dep't of Agric., 341 F.3d 961, 965 (9th Cir. 2003)).

Forest Plan."[5]

The Shasta Forest Plan directs the Forest Service to perform extensive periodic "monitoring," including monitoring of various wildlife characteristics. The monitoring plan calls for various types of wildlife monitoring, including "validation" monitoring, which is conducted every ten years "to determine if changes are needed in management practices . . . to provide adequate protection to wildlife," Shasta Forest Plan at 5-16, AR 4306; "effectiveness monitoring" which reports every five years on the "management indicator assemblages," id.; and various types of "implementation monitoring" on various timeframes, including monitoring to "ensure that management requirements and standards and guidelines are being met or exceeded with on-the-ground activities," Shasta Forest Plan at 5-15, AR 4305.[6]

2. Project-Level Studies

NFMA also mandates management of national forests at the "project" level. Ecology Center v. Castaneda, 562 F.3d 986, 990 (9th Cir. 2009). "Projects" include "permits, contracts, cooperative agreements, and other instruments for occupancy." Inland Empire Pub. Lands Council v. U.S. Forest Serv., 88 F.3d 754,

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[5] Available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_008103.pdf, http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_008111.pdf, and http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_008045.pdf. (last accessed Sept. 6, 2010).

[6] The court reiterates its previous characterization of this monitoring plan as "rather inscrutable." Conservation Cong., 555 F. Supp. 2d at 1099.

757 (9th Cir. 1996) ("Inland Empire") (quoting 36 C.F.R. § 219.10(e)). Under this scheme, individual project proposals must comply with NFMA's statutory requirements, NFMA's implementing regulations, and the forest plan or plans encompassing the project site. 16 U.S.C. § 1604(i), Lands Council, 537 F.3d at 989. The Forest Service uses NEPA's EIS process to determine whether a proposed project will satisfy these requirements. Inland Empire, 88 F.3d at 757. In an EIS, the acting federal agency must describe a reasonable range of alternatives for action, the predicted environmental consequences of each, and the reasons underlying the agency's selection of one action over the others. Under the applicable NFMA regulations, the Forest Service's assessment must be based on the "best available science." Ecology Ctr., 562 F.3d at 990 (citing 36 C.F.R. § 219.35(a) (2001); 69 Fed. Reg. 58,057 (Sept. 29, 2004)).[7]

[7] The court previously did not decide whether 1982 or 2000 version of the regulations governed. Conservation Cong., 555 F. Supp. 2d at 1098. The Ninth Circuit has subsequently explained that the 2000 regulation's "best available science" requirement governs, such that the superceded requirements of the 1982 regulation apply "only to the extent [that] they were incorporated into the [applicable] Forest Plan." Ecology Ctr., 562 F.3d at 990-91.

Here, plaintiffs argue that the Forest Service is *also* bound by the 1982 regulation, because the Shasta Forest Plan must have implicitly incorporated it. Absent such a incorporation, plaintiffs argue, "the court would have to find that the [Shasta Forest Plan] was out of compliance with the governing Forest Plan regulations for 15 years." Pls.' Opp'n at 8. Plaintiffs are incorrect. Projects and management are governed by statute, regulations, *and* the applicable forest plan. Lands Council, 537 F.3d at 989. Thus, the court need not assume that the plan implicitly but completely restated all obligations as they stood at the time the plan was adopted.

Much confusion in this case stems from plaintiffs' conflation of monitoring with prediction. Monitoring looks to conditions as they currently exist. The Forest Service may determine the present status of wildlife by directly surveying wildlife populations, or by using a heuristic such as proxy-on-proxy monitoring. The EIS, on the other hand, is necessarily a prediction, albeit one that is informed by past monitoring. See SEIS L-26, SAR 1102 (explaining that the EIS's analysis of the proposal's effects "must be *informed by*" monitoring data) (emphasis added). Because the project here is essentially a modification of habitat, the EIS must predict the ways in which the anticipated changes to habitat will change wildlife populations and viability. One way to do so is to use a simple proxy-on-proxy methodology, predicting that changes in species health will mirror the changes in habitat. Inland Empire, 88 F.3d 754, 761-63. Alternatively, factors other than habitat may be incorporated into the prediction. Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1066 (9th Cir. 2004) (prediction prepared pursuant to the Endangered Species Act used habitat as a proxy, but also "[took] into account non-habitat factors, including competition from other species, forest insects, and disease."). Indeed, as with use of proxy-on-proxy for monitoring, the Forest Service may not predict the project's effects solely by referring to future habitat if the relationship between habitat and species population is unexplained. Native Ecosystems Council v. Tidwell, 599 F.3d 926, 936 (9th Cir. 2010) (rejecting use of proxy-on-proxy to predict project's effects where

MIS had previously declined despite preservation of habitat and the Forest Service failed to "adequately discuss" this fact).

The court understands plaintiffs to argue that because of uncertainty as to the relationship between habitat trends and population trends, it is impossible to make an informed prediction of the project's effects absent a direct survey of the present populations of the MISs. See Tidwell, 599 F.3d at 933. It is nonetheless logically impossible to provide in the EIS, as plaintiffs further demand, "monitoring information . . . of the effects of the sale on the relevant MIS." Compl. ¶ 31.

B. The Supplemental EIS's Analysis of the Pilgrim Project

At issue here is whether the SEIS appropriately evaluated the likely impacts of the proposed action and demonstrated that the action will comply with the Forest Service's obligation to "provide for diversity of plant and animal communities." 16 U.S.C. § 1604(g)(3)(B).

The SEIS adopts a five-step process for "analyzing project effects to management indicator assemblages." SEIS L-4, SAR 1077. These steps are

> 1. Identifying which management indicator assemblages have habitat that would be either directly or indirectly affected by the project alternatives; these assemblages are potentially affected by the project.
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> 2. Disclosing the LRMP forest-level or bioregional-level monitoring requirements for this subset of forest management indicator assemblages.

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> 3. Analyzing project-level effects on management indicator assemblage habitats or habitat components for this subset.
>
> 4. Discussing the forest scale habitat trends and/or the bioregional population trends of representative species for this subset.
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> 5. Relating project-level impacts on management indicator assemblage habitat to habitat at the forest scale and/or to population trends of representative species of the affected assemblages at the forest or bioregional scale.

Id. Beginning with step one, "management indicator assemblage" is a term defined in the Shasta Forest Plan. Shasta Forest Plan 3-24, AR 4109. The assemblages are "groups of wildlife associated with vegetative communities or key habitat components." Id. The plan names nine such "wildlife assemblages," which are named after certain habitat characteristics. Id. The plan provides a brief summary of the habitat characteristics associated with each assemblage together with a non-exhaustive list of vertebrates represented by the assemblage.[8] Plaintiffs do not challenge the Forest Service's determination as to which assemblages will be affected by the Pilgrim project. The four at issue in the present motion are the "multi-habitat," "snag and down log," "late seral,"

[8] In adopting the Shasta Forest Plan, the Forest Service listed the specific individual species associated with each assemblage, including individual species suggested for use as indicators for the broader assemblage. Pls.' Opp'n Ex. B (Chapter III of the final EIS for the Shasta Forest Plan, explicitly incorporated into the plan at 3-14, AR 4109).

and "openings and early seral wildlife assemblage[s]."[9]

In the second step, the SEIS discussed Shasta Forest Plan's monitoring plan. In the present motion, the parties' argument concerning this plan and the SEIS's summary thereof solely pertain to whether the Forest Service could have predicted impacts on wildlife using methods other than the one actually used here. That question is not properly before the court.

The third and fourth steps in the SEIS's analysis describe the proposed project and the effects the project will have on habitat, including the degree to which the project will shift habitat from one assemblage type to another. For example, areas of the project designated for "regeneration harvest" will be transformed from "late seral" and "snag and down logs" habitat types to "open and early seral" habitat. SEIS L-17, SAR 1093. Plaintiffs do not challenge this aspect of the SEIS. C.f. Idaho Sporting Cong. v. Rittenhouse, 305 F.3d 957, 967 (9th Cir. 2002) (rejecting use of proxy-on-proxy analysis where the Forest Service has inaccurately categorized and tallied habitat).

Finally, the fifth step "analyze[s] the habitat components of each management indicator assemblage within the context of an example species." SEIS L-20, SAR 1096. These species are the mule deer, red-breasted nuthatch and white-breasted nuthatch. For each,

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[9] A fifth assemblage, for "hardwoods," will also be affected by the Pilgrim project. The court previously found the Forest Service's analysis of this assemblage, as represented by the white-breasted nuthatch, to be adequate. Conservation Cong., 555 F. Supp. 2d at 1104. Plaintiffs do not raise any arguments pertaining to the hardwood assemblage here.

the SEIS summarized the current condition of the habitat characteristics used by the species, the effects the proposed action and the various alternatives would have on habitat characteristics important to the species, cumulative effects relating to habitat, trends in habitat, and trends in species abundance. Based on this information, the SEIS reached conclusions regarding the project's likely effects on the three example species.

Thus, the Forest Service predicted changes to habitat, predicted the effect that those changes would have on three species identified as representatives of the various assemblages, and used this analysis to inform its prediction of the effects the project would have on the collections of species represented by the assemblages. This method of analysis bears, at the very least, an uncanny resemblance to the proxy-on-proxy method. Nonetheless, the Forest Service argues that it did *not* engage in proxy-on-proxy analysis. It argues that the SEIS's analysis of effects on species did not simply assume that 'x acres of habitat = y numbers of species,' instead incorporating some additional information. The Forest Service argued that it therefore analyzed impacts on habitat components and that it separately analyzed impacts on species. See, e.g., Def.'s Reply at 1. While the Ninth Circuit has labeled an apparently similar analysis as proxy-on-proxy, the label is unimportant. See Gifford Pinchot Task Force, 378 F.3d at 1066. The question is whether the relationship between habitat and species health was such that the Forest Service's use of habitat

in this case was proper. As the court explains below, in light of the additional analysis and information presented in the SEIS, the court concludes that it was.[10]

1. Mule Deer

The prior EIS observed that mule deer populations were generally in decline. Conservation Cong., 555 F. Supp. 2d at 1103 (citing AR 494). It described various authorities that attributed the decline to loss of habitat, but the EIS also acknowledged that others, including organizations discussed by plaintiffs, attributed this decline to an increase in predation. The initial EIS concluded that "'[c]urrently, the available data is not sufficient to conclude the causes of the decline [in mule deer abundance].'" Id. (quoting AR 494). Because the Forest Service stated that it was not possible to determine whether the past decline in deer abundance were caused by the decrease in habitat, the prior EIS had not shown that habitat was sufficiently correlated with species health to support the use of proxy-on-proxy analysis in predicting the project's effects on assemblages represented by mule deer. Id. at 1103-04.

In the SEIS, the Forest Service provides additional discussion of the relationship between mule deer abundance and habitat. The

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[10] The Forest Service further argues that, contrary to what was done here, "[i]t would have been wholly appropriate . . . if the Forest Service had ended its analysis with consideration of potential Project effects on [assemblage] habitat, alone." Def.'s Mem. at 11. Because that counterfactual hypothetical is not before the court, any discussion of said approach would be an advisory opinion.

SEIS explains that "open and early seral" habitat within the Shasta Trinity National Forest is decreasing, largely by growing into "late seral" habitat, and that mule deer populations are also decreasing, both in two geographic monitoring areas overlapping the project area and statewide. SEIS 16–20, SAR 1039, 1043. Whereas the previous EIS stated that the cause of the population decline was unknown, the SEIS quotes studies by the California Department of Fish and Game concluding that the long-term statewide decline in deer abundance is "due largely to long-term declines in habitat quality." SEIS 18, L-28, L-30, SAR 1041, 1104, 1106. The SEIS explains the relationship between habitat and deer abundance as being dominated by the availability of forage, SEIS 18, SAR 1041, although the SEIS acknowledged the need for cover habitat as well, SEIS L-20, SAR 1096.

The SEIS also specifically rejects the hypothesis that pressure from predators is the primary cause of mule deer decline. The SEIS acknowledges that the Mule Deer Foundation takes a contrary view, and that one study in the Sierra Nevada, which apparently considered deer generally, found that slightly over half (50.5%) of fawns succumbed to predators in their first year. SEIS 21, SAR 1044. The SEIS took the view, however, that fawns were made vulnerable to predators because of "resource stress," including poor maternal nutrition and lactation. SEIS 18, SAR 1041. Similarly, the California Department of Fish and Game concluded that although multi-state studies indicated that mountain lions were the primary predator, those studies "suggest[ed] that

mountain lion predation did not regulate . . . deer populations." SEIS L-31, SAR 1107 (quotation omitted). For this reason, the SEIS concludes that predation is in part a symptom of the underlying habitat pressures. Id.

The Forest Service acknowledges that the issue is complex. Plaintiffs take issue with the Forest Service's statement in its brief that the Forest Service "believes . . . that habitat loss, rather than predation, is the more likely cause of the deer's population decline." Def.'s brief at 12. This statement does not demonstrate a concession that the data is too inadequate to support a useful prediction.[11]

Finally, as noted above, the SEIS does not use acres of habitat as an unadorned proxy for predicted deer populations. The SEIS instead looks to particular habitat characteristics. The SEIS acknowledges that the present ratio of forage to cover habitat would ordinarily be "excellent" and that the project will shift this ratio to favor forage. The SEIS further states, however, that a countervailing trend in the project area is the transformation of forage to cover through growth of the forest and that the poor quality of forage habitat in the project area may limit the utility of presently available forage. SEIS L-21, L-26, SAR 1097, 1102.

[11] The court's prior decision rested on the Forest Service's statement that the available data were insufficient to support a conclusion, and the Forest Service has predictably responded by stating that the data are in fact sufficient. The court is wary of inviting agencies to overstate their confidence, claiming certainty when there is doubt. As explained in the body of this order, plaintiffs have not demonstrated that this is what occurred here.

The SEIS went on to conclude that "[n]either cover nor forage *quantity* are limiting factors in this area. Forage *quality* and water availability are limiting factors and are unlikely to change given the project's implementation." SEIS L-23, SAR 1099 (emphases in original). Thus, the SEIS concluded that although mule deer were limited by forage and that the project would increase the acreage of forage habitat, this increase was unlikely to significantly benefit mule deer. SEIS L-32, SAR 1108. The SEIS concluded that the project would not meaningfully alter trends in mule deer population. Id.

Plaintiffs have not challenged (or even acknowledged) the Forest Service's findings regarding the interplay of habitat and predation or the importance of water and forage quality rather than mere acreage of forest habitat. Accordingly, the court cannot find that the Forest Service's findings regarding the project's effects on mule deer were arbitrary or capricious.

2. Red-Breasted Nuthatch

The SEIS, like the EIS, discusses the red-breasted nuthatch to illustrate effects on "snag and down log" and "late seral" assemblages. In the prior order, the court observed that both of these habitat types had been increasing. Conservation Cong., 555 F. Supp. 2d at 1104 (citing AR 505, 511). Red-breasted nuthatches populations, however, revealed conflicting trends. In the project area, there was a statistically insignificant increase. In nearby locations, there had been insignificant decreases as well as a significant increase. Range wide, there was a statistically

significant increase in population. Id. The EIS itself acknowledged that in light of these results, "'it is hard to conclude that there is any significant relationship between forest wide increases in late seral assemblage habitat type and population trends for the red-breasted nuthatch.'" Id. (quoting AR 505). Accordingly, the court found proxy-on-proxy analysis to be inappropriate. Id.

As with mule deer, the Forest Service now retreats from its earlier statement of uncertainty regarding observed trends in habitat and red-breasted nuthatch population. Unlike with mule deer, however, the Forest Service has itself collected additional data in order to clarify the issue, including two years of direct surveys of red-breasted nuthatch populations within the project area. SAR 1501-44. These surveys demonstrated red-breasted nuthatches' ongoing presence in the project area, with no meaningful change in population between the two years. Id., c.f. Tidwell, 599 F.3d at 933.

The Forest Service has also explained its earlier statement that it was difficult to find a correlation between changes in local habitat and direct *observations* of changes in local population. In essence, the Forest Service argues that the observations are unreliable, such that the Forest Service concludes that local habitat is correlated with *actual* changes in population. The Forest Service bases this conclusion on the statements that data over broader geographic scales is much more reliable, given the transitory nature of the birds, that this data indicates an

increase in population, and that there is not evidence of factors that would cause local population trends to differ from the broader trends. SEIS 32, 42-43, SAR 1054, 1065-66.

Although a pre-requisite to proxy-on-proxy analysis (or similar methods) is a correlation between habitat and population, the agency need not demonstrate this correlation specifically using studies conducted in the project area. More broadly, NFMA generally does not require "on the ground" analysis to validate modeling predictions. Lands Council, 537 F.3d at 994 (overruling Ecology Ctr. v. Austin, 430 F.3d 1057 (9th Cir. 205) and narrowly construing Lands Council v. Forester of Region One of the U.S. Forest Serv., 395 F.3d 1019, 1036 (9th Cir. 2005). Of course, even when there is a generally recognized relationship, there can be reason to believe that the general relationship is inapplicable to a specific site, such that reliance on the general relationship is inappropriate. Tidwell, 599 F.3d at 931-36. This court's prior order is not inconsistent with the Ninth Circuit's subsequent decisions in Lands Council and Tidwell. The prior order rested on the Forest Service's own statement that trends in local habitat and observations of population were not "significant[ly] relat[ed]," AR 505, rather than the lack of location-specific data per se. The Forest Service has since explained that, despite some trends in local observation, it believes that local populations are increasing, such that habitat remains correlated with actual population.

Plaintiffs identify no specific fault with the above. They

simply note the difficulties inherent in securing population data for mobile species such as red-breasted nuthatches, re-assert that local observation data do not correlate with local changes in habitat, and suggest that for some other indicator species it might be possible to correlate local observations of population with habitat (or, presumably, demonstrate that habitat and populations were not correlated). These arguments are unpersuasive. The Forest Service must use the "best available" science, which will sometimes still be imperfect. Here, although the red-breasted nuthatch does not lend itself to collection of location-specific population data, plaintiffs have not demonstrated that any superior species was available. The court previously rejected plaintiffs' argument that either the northern spotted owl or black bear would have been a better indicator species, notwithstanding the fact the Shasta Forest Plan recommends these species but not the red-breasted nuthatch for monitoring. Conservation Cong., 555 F. Supp. 2d at 1105, 1105 n.11; Pls.' Opp'n, Ex. A, at 12.

Having clarified the analysis of past monitoring data, the SEIS predicts impacts on red-nuthatches, and thus on the "snag and down log" and "late seral" wildlife assemblages in a manner similar to the treatment of mule deer. The project will affect some habitats of both types through thinning, but in these areas the habitat will continue to provide the habitat characteristics relied on by nuthatches, including "soft snags," in excess of levels mandated by the Shasta Forest Plan. SEIS 28, 35, SAR 1051, 1058. The project will convert some areas of late seral and snag and down

log habitat to open and early seral habitat, removing from those areas soft snags and other habitat characteristics used by red-breasted nuthatches for nesting. Id. The SEIS concludes that these areas will nonetheless provide forage likely to be used by the species and that this change is not of a magnitude that will not harm the species. Id. In a final parallel to the mule deer analysis, the SEIS concludes that the particular habitat characteristic limiting red-breasted nuthatch populations in the project areas is a characteristic that will not be altered by the project, the availability of water. SEIS 29, 35, 45; SAR 1052, 1058, 1068. For these reasons, the SEIS concludes that the project "will not alter or contribute to existing forest-wide habitat or population trends for the red-breasted nuthatch." SEIS L-50; SAR 1126. Other than the arguments discussed above, plaintiffs do not challenge this analysis.

For these reasons, the court holds that the Forest Service's findings regarding the project's effects on the red-breasted nuthatch and associated wildlife assemblages were neither arbitrary nor capricious.

C. Best Available Science

Finally, plaintiffs argue that the SEIS did not use the best available science. This argument was not presented in plaintiffs' complaint or litigated in the prior motions, presumably because plaintiffs contended that the original EIS was not subject to this requirement, whereas all parties agree that the SEIS is. The court's prior order did not decide whether the Forest Service's use

of habitat in the EIS constituted best available science, although the court rejected plaintiffs' arguments that certain species would provide better indicators than the species selected by the Forest Service. Conservation Cong., 555 F. Supp. 2d at 1099 n.4, 1105, 1105 n.11.

The Forest Service has explained the reasons for its decision to use habitat to monitor and predict effects for forest management on species, and has concluded that method reflects the best available science. AR 3111, SAR 1013. The justifications for use of habitat data include the lack of fluctuation over short time scales, credibility, amenability to remote sensing, and importance of habitat in informing the Forest Service's management of habitat itself. AR 3111. Plaintiffs have not demonstrated that this method of analysis is "outdated or flawed." Ecology Ctr. v. Castaneda, 574 F.3d 652, 659 (9th Cir. 2009) (citing Trollers Ass'n v. Gutierrez, 452 F.3d 1104, 1120 (9th Cir. 2006)). The Forest Service relied on a range of scientific studies, a scientific method previously upheld by the Ninth Circuit, and explained the reasons for choosing this method. Plaintiffs have not demonstrated, in light of the deference owed to the agency, that any better science is available. For these reasons, the court concludes that the Forest Service relied on the best available science. Id.

IV. Conclusion

For the reasons stated above, the court ORDERS as follows:

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1. Defendant's motion for relief from judgment (Dkt. No. 61) is GRANTED.

IT IS SO ORDERED.

DATED: September 14, 2010.

LAWRENCE K. KARLTON
SENIOR JUDGE
UNITED STATES DISTRICT COURT